

**Title: How Will I Survive?****Brief Overview:**

Middle school students need practical application to experience the ups and downs of finance that plays an integral part of our adult lives. Students will use a career connection project to research how much it costs to survive on their own. Students will choose a career, family situation, housing, transportation, and manage finances. The culminating activity involves an oral, visual, and written representation of their life scenario.

**Links to NCTM 2000 Standards:**

- **Mathematics as Problem Solving, Reasoning and Proof, Communication, Connections, and Representation**

These five process standards are threads that integrate through the unit, although they may not be specifically addressed in the unit. They emphasize the need to help students develop the processes that are the major means for doing mathematics, thinking about mathematics, understanding mathematics, and communicating mathematics.

- **Number and Operation**

Students will demonstrate their ability to solve problems using arithmetic operations with technology to calculate a weekly/monthly budget. They will choose appropriate operations as in finding the percent of a number and provide written explanations of their results.

- **Data Analysis and Statistics**

Students will demonstrate their ability to organize and display data. They will analyze and interpret the circle graph.

- **Measurement**

Students will demonstrate their ability to adequately prepare a circle graph of their weekly/monthly budget using a circular protractor.

**Grade/Level:**

Grades 6-8

**Duration/Length:**

This unit is designed to take place over 7-10, 45 minute class periods.

**Prerequisite Knowledge:**

Students should have working knowledge of the following skills:

- Accessing a website from the Internet
- Creating a circle graph
- Solving a basic problem
- Computing whole numbers and decimals
- Finding the percent of a number
- Writing a paragraph using correct grammar and mathematical justifications
- Writing a friendly letter

## Student Outcomes:

Students will:

- develop a budget appropriate for a given salary.
- interpret and use formulas.
- maintain a checking account.
- complete worksheets.
- use a calculator effectively.
- evaluate the effectiveness of their budget and assess needs and goals accordingly.

## Materials/Resources/Printed Materials:

- Life Scenario cards
- Unexpected Life Circumstances Cards
- Circular protractors
- Checks/Checkbook register

## Development/Procedures:

### Day 1:

- Each student is to be given a **Life Scenario** card(sample attached). Each card is to be completed by the teacher prior to class and randomly drawn by the student. Because of time restrictions, all students no matter the occupation, will be residing in an apartment. The teacher designates on the Life Scenario card how many rooms(minimal amount) the apartment must contain based on the family situation for each scenario. Occupations come from one of two Internet sites:

**www.jobprofiles.com** This site provides an extensive listing of occupations and the information needed to complete the project.

**//stats.bls.gov/k12/html/tch\_mat1.htm** This site provides an extensive listing of occupations in the mathematical career field **ONLY** and the information needed to complete the project.

- Students will complete the **Your Occupation and Salary Worksheets** in class.
- Students will write a friendly letter for homework.

### Day 2:

- The students will be given the rubric (sample attached) used to score the project.
- Students will complete the **Data Sheet**.
- Students will be given their checks and check register. Students have the option of creating their own checkbook cover. **NOTE:** Each student should initially deposit an amount equal to two months pay.
- **Unexpected Life Circumstances Cards:** Students should randomly draw two money cards( one at the beginning of class and one at the end of class) per class session beginning with this session.

### Day 3:

- Students will complete the **Apartment Search** worksheet (sample attached) in class using the Internet site provided at the top of the worksheet.

**NOTE:** If using the Internet is not feasible for this aspect of the project, have the students use the classified portion of the newspaper or apartment rental guides. (Apartment rental guides are free of charge and found in a variety of businesses.)

- Unexpected Life Circumstances Cards need to be randomly drawn twice during this session.

#### **Day 4:**

- Students will complete the **Car Search** worksheet (sample attached) in class using the Internet site provided at the top of the worksheet. **NOTE:** If using the Internet is not feasible for this aspect of the project, have the students use the classified portion of the newspaper.
- Unexpected Life Circumstances Cards need to be randomly drawn twice during this session.

#### **Day 5:**

- Students will complete the **Budget Worksheet** and **Show Me the Money**.
- Unexpected Life Circumstances Cards need to be randomly drawn twice during this session.
- Students should begin preparing written report and visual presentations.

#### **Days 6 and 7:**

- Each student presents his/her project, while classmates score individual presentations using teacher provided form (sample attached).

#### **Performance Assessment:**

Student assessment will be based on the completion of the worksheets and the oral, written and visual presentation.

#### **Extension/Follow Up:**

- Students can be given the opportunity to purchase a home instead of renting. A local realtor could speak to the class about the process of purchasing a house. They can fill out paperwork to receive bank loans and credit checks.
- Students can interview someone from the community with their particular occupation.
- Students can research the occupation of their choice and do unit according to this occupation.
- Students can create a portfolio choosing two investment strategies to check everyday either from the newspaper or internet and record their progress. A financial expert could be a guest speaker to help students get started.

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## Example of Life Scenario Card

Teacher prepares one for each student in the class  
(suggested on an index card or thick paper for future use.)

Then each student can pick randomly what their life scenario is.

Circle  
One  
Fill-in if  
Married →

Fill-in for  
Students →

<b>This Is Your Life</b>		
<b>Marital Status:</b>	<b>Single</b>	<b>Married</b>
	if married, spouse's salary: _____	
<b># of Children:</b>		
<b># of Cars:</b>		
<b>Living Situation: # of Rooms:</b>		

## Materials - 2

Name Address	Date	Check #
Pay To The Order Of		\$ <input type="text"/>
		Dollars
Memo	Signature	

Name Address	Date	Check #
Pay To The Order Of		\$ <input type="text"/>
		Dollars
Memo	Signature	

Name Address	Date	Check #
Pay To The Order Of		\$ <input type="text"/>
		Dollars
Memo	Signature	

Name Address	Date	Check #
Pay To The Order Of		\$ <input type="text"/>
		Dollars
Memo	Signature	

### Materials - 3

[illegible]

## Unexpected Life Circumstances

You lose your cat and place an ad in the newspaper to find her. Cost: \$10.25	You broke your arm and have to pay for the casting. Cost: \$75.00	You win the lottery. Collect: \$500	It is your birthday. Receive \$50 from your grandma.
You buy a satellite for your television. Pay: \$200.28	Take a trip to Hawaii with a friend. Pay: \$600	Your sister repays you money she owed you. Collect: \$100	Donate money to the Retired Firemen/Police Foundation. Pay: \$25
Buy some compact discs from Music Co. Pay: \$36.97	Receive your tax return. Collect: \$715.12	Go to the amusement park. Pay: \$37.50	Win a radio contest! Collect: \$106.50
Your boss gives you a bonus for a job well done. Collect: \$102	Library books overdue. Pay: \$5.09	Car trouble. Pay: \$72	Car insurance due. Pay: \$300
You decide to have a garage sale. Collect: \$57.23	Pay for the Sunday newspaper. Pay: \$15	Take a date to the movies and get snacks. Pay: \$22.75	Renter's insurance due. Pay: \$105.36

Name \_\_\_\_\_

## **Your Occupation**

**Today you will be researching the occupation given to you and answering the following questions. The more information you find will make your final presentation easier to do. Remember to summarize the information you find and pull out only important topics that relate to the questions.**

- 1. What is the occupation assigned to you?**
  
  
  
  
  
  
  
  
  
  
- 2. Give a brief description of your occupation, including what type of people you might work with, nature of the work, and working conditions.**
  
  
  
  
  
  
  
  
  
  
- 3. What type of education is needed for your occupation?**
  
  
  
  
  
  
  
  
  
  
- 4. What are the advantages or rewards of your occupation?**
  
  
  
  
  
  
  
  
  
  
- 5. What are the disadvantages or stresses of your occupation?**
  
  
  
  
  
  
  
  
  
  
- 6. Give any other details that you would like to include about your occupation here:**



## Salary Worksheet

This worksheet will help you to calculate your monthly salary for your occupation. Use the research site to find your yearly salary or hourly wage.

If based on 1 year:

1 year = \_\_\_\_\_

To find monthly: (take 1 year and divide by # of months in a year)

1 year = \_\_\_\_\_ / \_\_\_\_\_ (# of months in a year)

Your monthly salary is: \_\_\_\_\_ + spouse's if it  
applies = \_\_\_\_\_

**-- OR --**

If based on \$/hour:

wage per hour = \_\_\_\_\_

To find monthly: (take wage per hour and multiply by 40 hours per week and then multiply by 4 weeks per month):

\$ \_\_\_\_\_ \* 40 hrs. \* 4 weeks

Your monthly salary is: \_\_\_\_\_ + spouse's if it  
applies = \_\_\_\_\_

## Homework

Write a friendly letter to a friend you have not seen in a while and give a brief description of your life scenario. It should include your marital status, number of children, number of cars, description of your occupation, and whether or not you have a working spouse.

# Data Sheet

**The following information will help you to keep your budget.**

**Marital Status:** \_\_\_\_\_ **Spouse:** Y: \_\_\_\_\_ N: \_\_\_\_\_

**Your Occupation:** \_\_\_\_\_ **Monthly Salary:** \_\_\_\_\_

**Spouse's Monthly Salary:** \_\_\_\_\_

### Children:

**Cars:**

## Budget Items

**Rent -> (30%) of monthly income. Make check payable to:  
Renter's Company, Inc.**

**Taxes -> (25%) of monthly income. Make check payable to: Government**

**Car -> (10%) of monthly income. Make check payable to:**  
**Car and Automotive Co.**

**Gas for Car -> (1) \$85/month (2) \$170/month. Make check payable to: Gas USA**

**Electricity -> (1-3) \$100/month (4/5) \$150/month. Make check payable to:  
Lightning Bolt, Inc.**

**Water -> (1-3) \$15/month (4/5) \$25/month. Make check payable to:  
H2O and Company**

**Phone -> (1-3) \$50/month (4/5) \$70/month. Make check payable to:  
Alexander Graham Bell**

**Cable -> \$40/month Make check payable to: Cable Guys**

**Groceries:**

(1)	\$200/month
(2)	\$300/month
(3)	\$400/month
(4)	\$500/month
(5)	\$600/month

Make check payable to: **The Grocery Store**

# How Will I Survive?

Evaluation Sheet for \_\_\_\_\_

Date \_\_\_\_\_

	Possible Points	Earned Points
<b>Meets Deadline</b>	<b>5</b>	_____
<b>Written Report</b>	<b>20</b>	_____
Presented in a folder		
Title		
Organized chronologically		
Written report summarizing life scenario,		
unexpected life circumstances, explanation		
of housing and transportation choices,		
explanation of success or failure of monthly budget.		
<b>Data Sheets/Homework</b>	<b>60</b>	_____
Accuracy		
Complete Sentences		
Grammar, Punctuation		
Spelling		
Neatness		
<b>Circle Graph</b>	<b>20</b>	_____
Title		
Labels		
Accuracy		
Neatness/Easy to Read		
<b>Checks/Checkbook</b>	<b>15</b>	_____
<b>Meets Monthly Budget</b>	<b>10</b>	_____
<b>Oral Presentation</b>	<b>20</b>	_____
Include life scenario, unexpected life		
circumstances, explanation of housing		
and transportation choices, explanation		
of success or failure of monthly budget.		
Prepared		
Audible		
Creative - visual aids		
<b>TOTAL</b>	<b>150</b>	_____

Name \_\_\_\_\_

## Car Search

Today you will be researching a car that you like and can afford. If you have been designated on your life scenario card as having 2 cars just double the amount that you spend on one car for your budget sheet.

I. Remember your car payment should only be 10% of your monthly salary.

$$10\% * \frac{\text{monthly salary}}{\text{monthly salary}} = \frac{\text{maximum you can spend on one or two cars}}{\text{maximum you can spend on one or two cars}}$$

II. Use the following directions to research your car:

- A. Click on Internet access (ask your teacher if unsure).
- B. Type **www.sunspot.net** into the address after the http://
- C. Select **Classifieds: Automotive**
- D. Select **Automall** - then follow directions given on the screen.
- E. Find a car you like and think you can afford.  
**TRY** 1st before asking!!!!!!!!!! Raise hand quietly to get help.
- F. Use the worksheet on the back to determine your monthly car payment. If you can afford one of these payment choices you may go on. If you cannot afford one of these payment choices, then you need to search for a car that is less expensive.

## Homework

Using complete sentences and descriptive words, give the details of your car below (include price, monthly payment, color, features, and anything else you would like to tell about). Explain why you chose this particular car.

## Buying a Car Using a Loan

Most people do not have enough money to go out and buy a car without using a loan. A loan is where you borrow an amount of money and pay it back a little at a time with a little extra for interest (this is how banks make money on loans). Most car loans are given for 36 months to 60 months.

Using the chart below and the price of the car you have found, determine how long you want to repay the loan and which payment is within your budget. Remember the amount from the front of this worksheet to see what you can afford!!!

	3 Years	4 Years	5 Years
<b>Purchase Price</b> amount from Internet			
<b>Tax 7%</b> take $.07 \times \text{Purchase Price}$			
<b>Loan Amount</b> Purchase Price + Tax			
<b>Interest at 9%</b> take $.09 \times \text{Loan Amount}$			
<b>Total Cost</b> Add first 4 above			
<b>Number of Months</b>			
<b>Monthly Payment</b> Divide by # of months			

Name \_\_\_\_\_

## Apartment Search

Today you will be researching an apartment that you like, can afford, and follows the restrictions set by your life scenario card.

- I.** Remember your rent should only be 30% of your monthly salary.

$$30\% * \frac{\text{monthly salary}}{\text{monthly salary}} = \frac{\text{maximum you can spend on your apartment}}{\text{maximum you can spend on your apartment}}$$

- II.** Use the following directions to research your apartment:

- A. Click on Internet access (ask your teacher if unsure).
- B. Type **www.rent.net** into the address after the http://
- C. Search for an apartment in any state/city.
- D. Follow directions given on page.

## Homework

1. State: \_\_\_\_\_ City: \_\_\_\_\_
2. How much does your apartment cost a month?
3. What made you decide on the location of this particular apartment instead of the others you were thinking about.

- 4. What characteristics do you like about this apartment?  
(Include # of bedrooms, bathrooms, patios, living room, dining room, kitchen, dishwasher, washer and dryer, and anything else included in the information about your apartment. If a floor plan or picture is shown, please draw it.**

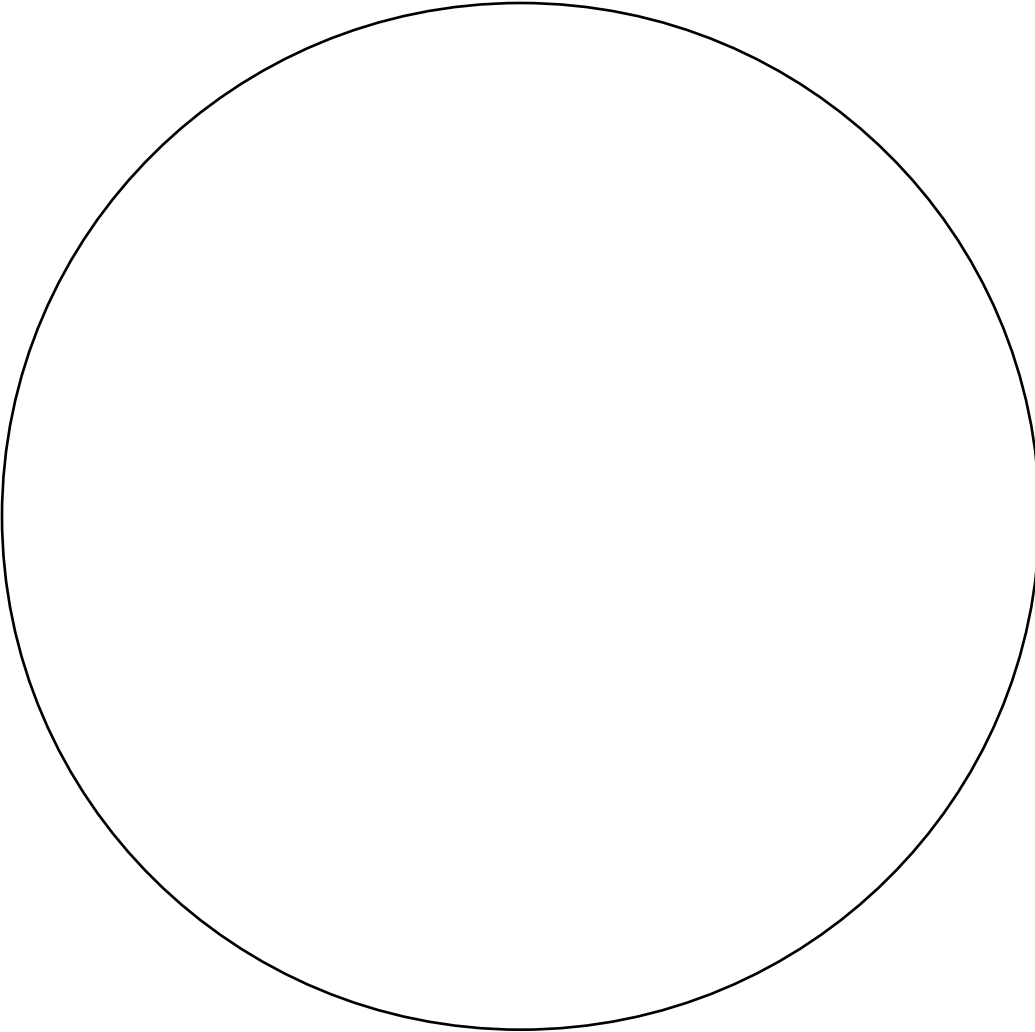
Name \_\_\_\_\_

**Show Me the Money!!!**

To visually see just how much money you are spending, use the chart below and appropriate instruments to create a circle graph on the back of the worksheet. Be sure to be neat and put appropriate labels.

	Decimal Part of Salary	Percent	Degree of Central Angle
Rent			
Taxes			
Car			
Gas			
Electric			
Water			
Phone			
Groceries			
Cable			
Other			
TOTAL			





# Budget Worksheet

Name \_\_\_\_\_

**Your Monthly Salary** + \_\_\_\_\_  
(include spouse's if applicable)

**Total (Collect) Unexpected  
Life Circumstances** + \_\_\_\_\_

**Rent** - \_\_\_\_\_

**Taxes** - \_\_\_\_\_

**Car Payment** - \_\_\_\_\_

**Gas for Car** - \_\_\_\_\_

**Electric Bill** - \_\_\_\_\_

**Water Bill** - \_\_\_\_\_

**Phone Bill** - \_\_\_\_\_

**Groceries** - \_\_\_\_\_

**Cable** - \_\_\_\_\_

**Total (Pay) Unexpected  
Life Circumstances** - \_\_\_\_\_

**Clothing (your choice for  
amount)** - \_\_\_\_\_

**TOTAL** \_\_\_\_\_